DATE: 08/19/1999 TIME: 17:40:33

INPUT SET: S32973.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

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1
                                      SEQUENCE LISTING
                                                          ENTERED
 2
 3
    (1)
           General Information:
          (i) APPLICANT: Martin Roland Jensen
 5
 6
                         Soren Mouritsen
 7
                         Henrik Elsner
 8
                         Iben Dalum
 9
         (ii) TITLE OF INVENTION: Modified human TNF-alpha molecules, DNA
10
                 encoding them, and vaccines containing said modified
11
12
                 TNF-alpha or DNA
13
14
        (iii) NUMBER OF SEQUENCES: 42
15
16
        (iv) CORRESPONDENCE ADDRESS:
               (A) ADDRESSEE: JACOBSON, PRICE, HOLMAN & STERN
17
               (B) STREET: 400 Seventh St., N.W.
18
19
               (C) CITY: Washington, DC
20
               (E) COUNTRY: USA
21
               (F) ZIP: 20004
22
23
        (V) COMPUTER READABLE FORM:
               (A) MEDIUM TYPE: Floppy disk
24
25
               (B) COMPUTER: IBM PC compatible
               (C) OPERATING SYSTEM: PC-DOS/MS-DOS
26
               (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
27
28
29
        (vi) CURRENT APPLICATION DATA:
30
               (A) APPLICATION NUMBER: 09/060,294
31
               (B) FILING DATE: 15-APR-1998
32
33
        (vii) PRIOR APPLICATION DATA:
34
               (A) APPLICATION NUMBER: 60/044,187
35
               (B) FILING DATE: 24-APR-1997
36
        (viii) ATTORNEY/AGENT INFORMATION:
37
               (A) NAME: Price, D. Douglas
38
               (B) REGISTRATION NUMBER: 24,514
39
               (C) REFERENCE/DOCKET NUMBER: P60953US1
40
41
42
        (ix) TELECOMMUNICATION INFORMATION:
43
               (A) TELEPHONE: (202) 638-6666
44
               (B) TELEFAX: (202) 393-5350
45
    (2) INFORMATION FOR SEQ ID NO: 1:
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DATE: 08/19/1999 TIME: 17:40:33

INPUT SET: S32973.raw

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47
          (i) SEQUENCE CHARACTERISTICS:
48
49
              (A) LENGTH: 474 base pairs
               (B) TYPE: nucleic acid
50
               (C) STRANDEDNESS: double
51
               (D) TOPOLOGY: linear
52
53
54
         (ii) MOLECULE TYPE: cDNA
55
56
        (iii) HYPOTHETICAL: NO
57
58
         (iv) ANTI-SENSE: NO
59
60
         (vi) ORIGINAL SOURCE:
61
               (A) ORGANISM: Homo sapiens
62
63
         (ix) FEATURE:
64
               (A) NAME/KEY: CDS
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               (B) LOCATION: 1...474
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               (C) IDENTIFICATION METHOD: experimental
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               (D) OTHER INFORMATION:/codon start= 1
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                      /evidence= EXPERIMENTAL
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73
74
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    Met Val Arg Ser Ser Ser Arg Thr Pro Ser Gln Tyr Ile Lys Ala Asn
77
78
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79
    TCT AAA TTC ATC GGT ATA ACT GAG CTG CAG CTC CAG TGG CTG AAC CGC
80
                                                                              96
    Ser Lys Phe Ile Gly Ile Thr Glu Leu Gln Leu Gln Trp Leu Asn Arg
81
82
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83
    CGG GCC AAT GCC CTC CTG GCC AAT GGC GTG GAG CTG AGA GAT AAC CAG
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    Arg Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln
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    CTG GTG GTG CCA TCA GAG GGC CTG TAC CTC ATC TAC TCC CAG GTC CTC
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                                               75
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    ATC AGC CGC ATC GCC GTC TCC TAC CAG ACC AAG GTC AAC CTC CTC TCT
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    Ile Ser Arq Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser
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DATE: 08/19/1999 TIME: 17:40:34 VPUT SET: S32973.raw GAG GCC 336 Glu Ala

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DATE: 08/19/1999 TIME: 17:40:34

INPUT SET: S32973.raw

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187	ATG	GTC	AGA	TCA	TCT	TCT	CGA	ACC	CCG	AGT	GAC	AAG	CCT	GTA	GCC	CAT	48
188						Ser											
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191						CAA											96
192	Val	Val	Ala	Asn	Pro	Gln	Ala	Glu	Gly	Gln	Leu	Gln	Trp	Leu	Asn	Arg	
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195						CTG											144
196	Arg	Ala	Asn		Leu	Leu	Ala	Asn	_	Val	GLu	Leu	Arg	_	Asn	GIn	
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204						Ala											
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### RAW SEQUENCE LISTING PATENT APPLICATION US/09/060,294A

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233 234 235 236 237 238 239 240	Met 1	) SE(	(1) MOI QUENC	D) TO LECUI CE DI Ser	DPOLO LE TY ESCRI Ser 5	amin DGY: YPE: IPTIC	no ac line prof DN: S	ear cein SEQ :	Pro	Ser 10	Asp				15			
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233 234 235 236 237 238 239 240 241 242 243 244 245	Met 1 Val	Val	(1) MOD QUENC Arg	D) TO LECUI CE DI Ser Asn 20	Ser Pro	amin DGY: YPE: IPTIC	no ac line prof DN: S Arg	ear cein SEQ : Thr	Pro Gly 25	Ser 10 Gln	Asp Leu	Gln	Trp Arg	Leu 30	15 Asn	Arg		
233 234 235 236 237 238 239 240 241 242 243 244 245 246	Met 1 Val	Val	(1) MOD QUENC Arg	D) TO LECUI CE DI Ser Asn 20	Ser Pro	amin DGY: YPE: IPTIO Ser Gln	no ac line prof DN: S Arg	ear cein SEQ : Thr	Pro Gly 25	Ser 10 Gln	Asp Leu	Gln	Trp	Leu 30	15 Asn	Arg		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247	Met 1 Val	Val Val	Arg Ala Asn 35	LECUI CE DI Ser Asn 20	Ser 5 Pro	amin DGY: YPE: IPTIC Ser Gln Leu	prod DN: S Arg Ala	ear tein SEQ I Thr Glu Asn 40	Pro Gly 25 Gly	Ser 10 Gln Val	Asp Leu Glu	Gln	Trp Arg 45	Leu 30 Asp	15 Asn Asn	Arg Gln		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248	Met 1 Val	Val Val Ala	Arg Ala Asn 35	LECUI CE DI Ser Asn 20	Ser 5 Pro	amin DGY: YPE: IPTIO Ser Gln	prod DN: S Arg Ala Ala	ear tein SEQ I Thr Glu Asn 40	Pro Gly 25 Gly	Ser 10 Gln Val	Asp Leu Glu	Gln Leu Tyr	Trp Arg 45	Leu 30 Asp	15 Asn Asn	Arg Gln		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249	Met 1 Val	Val Val	Arg Ala Asn 35	LECUI CE DI Ser Asn 20	Ser 5 Pro	amin DGY: YPE: IPTIC Ser Gln Leu	prod DN: S Arg Ala	ear tein SEQ I Thr Glu Asn 40	Pro Gly 25 Gly	Ser 10 Gln Val	Asp Leu Glu	Gln	Trp Arg 45	Leu 30 Asp	15 Asn Asn	Arg Gln		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250	Met 1 Val Arg	Val Val Ala Val 50	Arg Ala Asn 35	LECUI CE DI Ser Asn 20 Ala	Ser 5 Pro	amin DGY: YPE: IPTIC Ser Gln Leu	prod DN: S Arg Ala Ala Gly 55	tein SEQ Thr Glu Asn 40	Pro Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile	Gln Leu Tyr	Trp Arg 45 Ser	Leu 30 Asp	15 Asn Asn Val	Arg Gln Leu		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251	Met 1 Val Arg Leu	Val Val Ala Val 50	Arg Ala Asn 35	LECUI CE DI Ser Asn 20 Ala	Ser 5 Pro	amin DGY: YPE: IPTIO Ser Gln Leu Glu	prod DN: S Arg Ala Ala Gly 55	tein SEQ Thr Glu Asn 40	Pro Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile	Gln Leu Tyr	Trp Arg 45 Ser	Leu 30 Asp	15 Asn Asn Val	Arg Gln Leu Leu		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252	Met 1 Val Arg	Val Val Ala Val 50	Arg Ala Asn 35	LECUI CE DI Ser Asn 20 Ala	Ser 5 Pro	amin DGY: YPE: IPTIC Ser Gln Leu	prod DN: S Arg Ala Ala Gly 55	tein SEQ Thr Glu Asn 40	Pro Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile	Gln Leu Tyr	Trp Arg 45 Ser	Leu 30 Asp	15 Asn Asn Val	Arg Gln Leu		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253	Met 1 Val Arg Leu Phe 65	Val Val Ala Val 50	Arg Ala Asn 35 Val	ECUI CE DI Ser Asn 20 Ala Pro	ESCR: Ser 5 Pro Leu Ser	amin DGY: YPE: IPTIO Ser Gln Leu Glu Ala 70	prod DN: S Arg Ala Ala Gly 55	tein SEQ Thr Glu Asn 40 Leu Ser	Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile 75	Gln Leu Tyr 60	Trp Arg 45 Ser	Leu 30 Asp Gln	15 Asn Asn Val Glu	Arg Gln Leu Leu 80		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254	Met 1 Val Arg Leu Phe 65	Val Val Ala Val 50	Arg Ala Asn 35 Val	ECUI CE DI Ser Asn 20 Ala Pro	DPOLO ESCR: Ser 5 Pro Leu Ser Lys	amin DGY: YPE: IPTIO Ser Gln Leu Glu	prod DN: S Arg Ala Ala Gly 55	tein SEQ Thr Glu Asn 40 Leu Ser	Gly 25 Gly Tyr	Ser 10 Gln Val Leu Phe	Asp Leu Glu Ile 75	Gln Leu Tyr 60	Trp Arg 45 Ser	Leu 30 Asp Gln	15 Asn Asn Val Glu Leu	Arg Gln Leu Leu 80		
233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255	Met 1 Val Arg Leu Phe 65	Val Val Ala Val 50	Arg Ala Asn 35 Val	ECUI CE DI Ser Asn 20 Ala Pro	ESCR: Ser 5 Pro Leu Ser	amin DGY: YPE: IPTIO Ser Gln Leu Glu Ala 70	prod DN: S Arg Ala Ala Gly 55	tein SEQ Thr Glu Asn 40 Leu Ser	Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile 75	Gln Leu Tyr 60	Trp Arg 45 Ser	Leu 30 Asp Gln Thr	15 Asn Asn Val Glu	Arg Gln Leu Leu 80		
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233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255	Met 1 Val Arg Leu Phe 65 Ile	Val Val Val So Val Val So Val	Arg Ala Asn 35 Val Tyr Arg	CE DI Ser Asn 20 Ala Pro Ile	DPOLO ESCR: Ser 5 Pro Leu Ser Lys Ala 85	amin DGY: YPE: IPTIO Ser Gln Leu Glu Ala 70	prod DN: S Arg Ala Ala Gly 55 Asn	ear tein SEQ Thr Glu Asn 40 Leu Ser	Pro Gly 25 Gly Tyr Lys Gln	Ser 10 Gln Val Leu Phe	Asp Leu Glu Ile 75 Lys	Gln Leu Tyr 60 Gly	Trp Arg 45 Ser Ile Asn	Leu 30 Asp Gln Thr	15 Asn Asn Val Glu Leu 95	Arg Gln Leu Leu 80 Ser		

DATE: 08/19/1999 TIME: 17:40:35

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### \*\*\*\*\* PREVIOUSLY ERRORED SEQUENCES - EDITED \*\*\*\*\*

228 229	(2)	INF	ORMA'	rion	FOR	SEQ	ID 1	NO: 4	4:					٠		
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238			_		~		•	<b></b> 1		<b>~</b>	•	<b>.</b>	<u>.</u>	**- 7	. 1 -	*** _
239		Val	Arg	Ser		Ser	Arg	Thr	Pro		Asp	ràs	Pro	vaı		His
240	1				5					10					15	
241	_			_	_						_	3	_	_	_	_
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267	145					150					155					
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269																

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/060,294A

DATE: 08/19/1999 TIME: 17:40:35

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Line

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Original Text

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/060,294A

DATE: 08/18/1999 TIME: 10:30:40

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This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

	1	SEQUENCE LISTING
	2	
	3	(1) General Information:  (i) APPLICANT: Martin Roland Jensen Soren Mouritsen Henrik Elsner Iben Dalum  (ii) TITLE OF INVENTION: Modified human TNF-alpha molecules, DNA
	4	Orrea des Au
	5	(i) APPLICANT: Martin Roland Jensen
	6	Soren Mouritsen
	7	Henrik Elsner
	8	Iben Dalum
	9	(ii) TITLE OF INVENTION: Modified human TNF-alpha molecules, DNA
	10 11	encoding them, and vaccines containing said modified
	12	TNF-alpha or DNA
	13	INT-dipha of DNA
	14	(iii) NUMBER OF SEQUENCES: 42
	15	(111)
	16	(iv) CORRESPONDENCE ADDRESS:
	17	(A) ADDRESSEE: JACOBSON, PRICE, HOLMAN & STERN
	18	(B) STREET: 400 Seventh St., N.W.
	19	(C) CITY: Washington, DC
	20	(E) COUNTRY: USA
>	21	(F) POSTAL CODE (ZIP): 20004
	22	
	23	(V) COMPUTER READABLE FORM:
	24	(A) MEDIUM TYPE: Floppy disk
	25	(B) COMPUTER: IBM PC compatible
	26	(C) OPERATING SYSTEM: PC-DOS/MS-DOS
	27	(D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
	28 29	(vi) CURRENT APPLICATION DATA:
	30	(A) APPLICATION NUMBER: 09/060,294
	31	(B) FILING DATE: 15-APR-1998
	32	(b) 111110 bill. 15 iii i 1550
	33	(vii) PRIOR APPLICATION DATA:
	34	(A) APPLICATION NUMBER: 60/044,187
	35	(B) FILING DATE: 24-APR-1997
	36	
	37	(viii) ATTORNEY/AGENT INFORMATION:
	38	(A) NAME: Price, D. Douglas
	39	(B) REGISTRATION NUMBER: 24,514
	40	(C) REFERENCE/DOCKET NUMBER: P60953US1
	41	
	42	(ix) TELECOMMUNICATION INFORMATION:
	43	(A) TELEPHONE: (202) 638-6666
	44	(B) TELEFAX: (202) 393-5350
	45	

DATE: 08/18/1999 TIME: 10:30:40

INPUT SET: S32973.raw

#### **ERRORED SEQUENCES FOLLOW:**

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(2) INFORMATION FOR SEQ ID NO: 4:
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          (i) SEQUENCE CHARACTERISTICS:
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                (A) LENGTH: 158 amino acids
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                (B) TYPE: amino acid
233(D)TOPOLOGY: linear
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         (ii) MOLECULE TYPE: protein
235
236
      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
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269
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# **SEQUENCE VERIFICATION REPORT** PATENT APPLICATION *US/09/060,294A*

DATE: 08/18/1999 TIME: 10:30:41

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Unknown or Misplaced Identifier Wrong or Missing Sequence Topology 21

(F) POSTAL CODE (ZIP): 20004 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4: 237